Figure : TCP Remote Connection principle

Service

Client

HostAddress:HostPort

Figure : Remote connection scheme

DeviceSideApp

ServerSideApp

Client 1

Service

host side

device side

CommandParser

**1**

**2**

**3**

**7**

HostAddress:HostPort

LocalAddress:LocalPort

**5**

**4**

ServerAddress:ServerPort

Client 2

**6**

**.<size><cmd><id><data>.**

Figure : TCP remote connection

ServerAppSide

DeviceAppSide

Service

Client

LISTEN

CONNECT

*DeviceAppSide connects at ServerAddress:ServerPort and sends the LISTEN command.*

*ServerAppSide opens a server socket and waits for client connections at HostAddress:HostPort.*

*As soon as client connects the CONNECT command is sent.*

*DeviceSideApp opens a client socket on service (LocalAddres:LocalPort)*

*ServerAppSide is running on ServerAddress:ServerPort*

Figure : Data exchanges

ServerAppSide

DeviceAppSide

Service

Client

DATA

DATA

*Data coming from client is encapsulated in a DATA frame.*

*Data coming from service is encapsulated in a DATA frame.*

Figure : Connection closing

ServerAppSide

DeviceAppSide

Service

Client

CLOSE

CLOSE

*Client closes connection, ServerAppSide sends a Close command.*

*Service closes connection, ServerAppSide sends a Close command.*

*Server-device link is severed; Service connection and Client connection are closed.*